



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,052	01/26/2001	Veijo Vantinen	490-010115-US (PAR)	7249
2512	7590	12/02/2010		
Perman & Green, LLP 99 Hawley Lane Stratford, CT 06614			EXAMINER MEHRPOUR, NAGHMEH	
			ART UNIT	PAPER NUMBER
			2617	
			MAIL DATE	DELIVERY MODE
			12/02/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/771,052	Applicant(s) VANTTINEN, VEIJO	
	Examiner MELODY MEHRPOUR	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 1-34**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Verdonk et al. (US Patent Number 2006/0003775 A1) in view of Vialen (US Patent Number 6,826,406).

Regarding claims 1, 18, Verdonk teaches a method/packet-switched radio system comprising:

a network part of the radio system, which comprises a core network and a radio network connected to the core network (see figure 1, col 2 lines 28-40) radio connection from the radio network to a subscriber terminal (col 3 lines 49-65); and

the network part comprising location service means for locating the subscriber

•terminal (col 2 lines 48-67, col 5 lines 1-32); and

Art Unit: 2617

the subscriber terminal comprises means for transmitting a request message for location service to the core network via the radio network (col 5 lines 1-20);

the network part comprises means for performing at least one function required in the request message and means for transmitting a response message to the subscriber terminal via the radio network (col 4 lines 65-67, col 5 lines 1-32).

Examiner considers "the complete location estimate" as "longitude and latitude information" where the subscriber termination is located. In addition, the "timing information of the radio connection relating to a location" as claimed in claims 1 and 14 is claimed broadly; and does not indicate whether it is a timing advance factor or round trip time as in specification, paragraph [0060], therefore, examiner has an option to interpret the "timing information of the radio connection relating to a location" as either a time stamp as shown in Verdonk or a timing advance factor. Verdonk discloses, in Fig. 1, a combination of serving node 141, customer server 140 and server control point SCP 142 (a core network) determines a location of mobile unit 128 (subscriber) by transmitting a location request to MSC 102 via a packet data network 112 (packet switch radio network). See col.5, lines 1-7 & lines 20-25 & 32-40. The MSC 102 sends a page request to the mobile unit 128 (the packet switch radio network transmitting a paging message to the subscriber terminal). See col.5, lines 50-52. The mobile unit 128 responses its location to MSC 102 (subscriber unit transmits a page response to the radio network) comprising the required mobile unit 128 's location (the radio network transmits the page response message to the core network). See col.5, lines 50-60. The response sent from the mobile unit 128 comprises identity of cell 144 serving the mobile

Art Unit: 2617

unit (identity of serving cell), and longitude and latitude information (other information useful in complete location estimate) See col.5, lines 37-42 & lines 55-60 & col.6, lines 10-20); a time stamp indicating what time the mobile's location was last determined (timing information of the radio connection relating to a location). See col. 5, lines 45-50.

Verdonk does not specifically mention that the connection is UM connection from the radio network to a subscriber terminal. However, Vialen teaches the connection is UM connection from the radio network to a subscriber terminal (col 5 lines 50-65).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Vialen with Verdonk, in order to provide good bear quality service while reconfiguring a cellular network in the UMTS wherein a single connection can simultaneously use at least one or more radio bearers.

Regarding claims 2, 19, Verdonk teaches a method/a radio system wherein the request message relates to one of the following location service functions:

determination of the subscriber terminal location, informing of an outside client of the radio system of the subscriber terminal location, transmission of location assistance data to the subscriber terminal (col 5 lines 48-60).

transmission of a ciphering key for decrypting the location assistance data to the subscriber terminal.

Art Unit: 2617

Regarding claims 3, 20, Verdonk teaches method/a radio system wherein the information included in the request message comprises desired quality of service of the requested location service (col 2 lines 40-49). As evidence by Willars US Patent 6, 285,667)

Regarding claims 4, 21, Verdonk teaches a method/a radio system wherein the other information comprises at least one of the following parameters:

receiving power of the serving cell, receiving power of at least one neighboring cell, charge level of the battery in the subscriber terminal, information on the conditions at the location of the subscriber terminal, identity of a separate device connected to the subscriber terminal (col 7 lines 62-67, col 8 lines 1-11).

Regarding claims 5, 22, Verdonk teaches a method/a radio system wherein the subscriber terminal comprises means for inserting at least part of the information included in the request message received by the core network into the request message (col 5 lines 50-52).

Regarding claims 6, 23, Verdonk teaches a method/a radio system wherein the radio network comprises means for inserting at least part of the information included in the

Art Unit: 2617

request message received by the core network into the request message (col 5 lines 1-32).

Regarding claims 7, 24, Verdonk teaches a method/a radio system wherein, if the function is location of the subscriber terminal, a special location procedure will be performed (col 7 lines 7-48).

Regarding claims 8, 25, Verdonk teaches a method/a radio system wherein the core network comprises means for locating the subscriber terminal on the basis of the information included in the request message (col 2 lines 28-60).

Regarding claims 9, 26, Verdonk teaches a method/a radio system, wherein the procedures required by the location service comprise receiving signals in the subscriber terminal and measuring them, or transmitting signals from the subscriber terminal (col 2 lines 40-60).

Regarding claims 10, 27, Verdonk teaches method/a radio system wherein the signals received in the subscriber terminal to implement the location service comprise signals transmitted by the radio system including signals transmitted by other base stations of the radio system than by that of the serving cell, or the signals transmitted by a satellite of the GPS system (col 2 lines 40-60).

Regarding claims 11, 28, Verdonk teaches method/a radio system wherein the network part of the radio system comprises means for checking whether the location of the subscriber terminal carried out corresponds to the target set for the quality of service (0216).

Regarding claims 12, 29, Verdonk teaches a method/a radio system wherein, if the target set for the quality of service is not achieved, the network part will perform a location service, which offers a better quality of service (col 6 lines 40-67, col 7 lines 1-6).

Regarding claims 13, 30, Verdonk teaches a method/a radio system wherein tracing of the route traveled by the subscriber terminal is performed so that the subscriber terminal at regular intervals transmits a request message requesting location of the subscriber terminal (col 5 lines 1-32).

Regarding claims 14, 31, Verdonk teaches a method/a radio system wherein tracing of the route traveled by the subscriber terminal is performed so that one parameter to be added to one location request is a definition of the need to determine the location of the subscriber terminal at regular intervals (col 5 lines 1-20).

Regarding claims 15, 32, Verdonk teaches a method/a radio system wherein the outside client of the radio system is informed of the location of the subscriber terminal by the core network, by the subscriber terminal (col 2 lines 28-60).

Regarding claims 16, 33, Verdonk teaches a radio system wherein the response message contains at least one of the following pieces of information: the location of the subscriber terminal (col 2 lines 60-7, col 3 lines 1-15), location assistance data, a ciphering key for decrypting the ion assistance data, an error code, information on whether location information on the subscriber terminal is to be submitted to an outside client.

Regarding claims 17, 34, Verdonk fails to teach a method/a radio system wherein the request message and the response message are messages of protocol layers that correspond to the third layer of the OSI model. However Vialen teaches wherein the mobile of third generation known by universal mobile telecommunications system (UMTS) transferred amount of data most preferably in the radio resource control (LLC) of layer 3 structure according to International Standardization Organization (OSI) (col 5 lines 65-67, col 6 lines 1-10). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Vialen with Verdonk, Therefore, it would have been obvious to one of ordinary skill in the art at the

Art Unit: 2617

time of the invention to combine the above teaching of Vialen with Verdonk, in order to provide good bear quality service while reconfiguring a cellular network in the UMTS wherein a single connection can simultaneously use at least one or more radio bearers.

Response to Arguments

Applicant's arguments filed 09/22/10 have been fully considered but they are not persuasive. After carefully considering all the previous office actions, for the purpose of appeal, the Examiner decided to maintain the rejection based on the office action mailed on 12/14/09.

In response to the applicant's argument that "*Nowhere does Verdonk disclose or suggest that a request is made by a subscriber terminal for location service pertaining to that subscriber terminal as called for in Applicant's claim 1. Verdonk merely discloses the customer server 140 making a request to the SCP 142 (or SN 141) for the location of a specified mobile unit 122, 126, 128, 130 and nothing more.*"

Examiner considers "the complete location estimate" as "longitude and latitude information" where the subscriber termination is located. In addition, the "timing information of the radio connection relating to a location". Verdonk discloses, in Fig. 1, a combination of serving node 141, customer server 140 and server control point SCP 142 (a core network) determines a location of mobile unit 128 (subscriber) by transmitting a location request to MSC 102 via a packet data network 112 (packet switch radio network). See col.5, lines 1-7 & lines 20-25 & 32-40. The MSC 102 sends a page request to the mobile unit 128 (the packet switch radio network transmitting a paging message to the subscriber terminal). See col.5, lines 50-52. The mobile unit 128 responses its location to MSC 102 (subscriber unit transmits a page response to the

Art Unit: 2617

radio network) comprising the required mobile unit 128 's location (the radio network transmits the page response message to the core network). See col.5, lines 50-60. The response sent from the mobile unit 128 comprises identity of cell 144 serving the mobile unit (identity of serving cell), and longitude and latitude information (other information useful in complete location estimate) See col.5, lines 37-42 & lines 55-60 & col.6, lines 10-20); a time stamp indicating what time the mobile's location was last determined (timing information of the radio connection relating to a location). See col. 5, lines 45-50. Verdonk does not specifically mention that the connection is UM connection from the radio network to a subscriber terminal. However, Vialen teaches the connection is UM connection from the radio network to a subscriber terminal (col 5 lines 50-65). Therefore, by combining the above teaching of Vialen with Verdonk, providing good bear quality service while reconfiguring a cellular network in the UMTS wherein a single connection can simultaneously use at least one or more radio bearers.

Conclusion

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2617

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

3. Any responses to this action should be mailed to:

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELODY MEHRPOUR whose telephone number is 5(571)272-7913. The examiner can normally be reached on Mon-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne Bost can be reached (571) 272-7023.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Naghmeh Mehrpour/

Primary Examiner, Art Unit 2617

Nov 30, 2010

Application/Control Number: 09/771,052
Art Unit: 2617

Page 12